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HOANG, HIEU T				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/657,976

Applicant(s)

PABLA ET AL.

Examiner

HIEU T. HOANG

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 March 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 06/08/2007
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This office action is in response to the Appeal Brief filed on 03/20/2008.

Reopening Prosecution

2. In view of the Appeal Brief filed on 03/20/2008, PROSECUTION IS HEREBY REOPENED. A new ground of rejection is set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

A decision to reopen the prosecution has been made with approval of a supervisory patent examiner.

/Bunjod Jaroenchonwanit/

Supervisory Patent Examiner, Art Unit 2152

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-7, 9 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 1 recites on lines 20-23: "the requesting peer node, etc., become a content publisher peer node" in the last limitation. It is vague whether a content publisher peer node is the same as the content publisher peer node previously recited in the second limitation. For examining purpose, "a content publisher peer node" will be read as another content publisher peer node. Correction is required. Same rationale applies to claim 9, 14.

5. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 recites on lines 5-6 "receive a portion of the particular content from the first content publisher peer node that caches the particular content in response to the request" in the second limitation. This limitation has multiple meanings, which make it vague. First meaning "(receive a portion of the particular content from the first content publisher peer node that caches the particular content) in response to the request". Second meaning "receive a portion of the particular content from (the first content publisher peer node that caches the particular content in response to the request)." Steps in parentheses are implemented first. For examining purpose, the first meaning is given to the limitation. Same rationale applies to the last limitation of the claim on lines 7-9.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 12, 20, 24, 25, 28 and 33 are rejected under 35 U.S.C. 102(e) as being anticipated by Burbeck et al. (US 2003/0217139, hereafter Burbeck).

8. For claim 1, Burbeck discloses a system, comprising:

- a plurality of peer nodes coupled to a network (abstract, peers in a peer-to-peer network);
- at least one of the plurality of peer nodes configured as a publisher peer node for one or more contents cached on the peer node, wherein each publisher peer node is configured to publish one or more advertisements on the network, wherein each advertisement corresponds to one of the one or more contents cached on the peer node ([0023], lines 1-3, a peer node publishes advertisements what content the node holds), and wherein each advertisement includes information for requesting a corresponding content ([0111] lines 18-25,

- the alive message or advertisement contains includes call back information, [0112], [0113], file sharing); and
- at least a subset of the plurality of peer nodes each configured to discover published advertisements on the network and request content corresponding to the discovered advertisements in accordance with the information included in the advertisements ([0023] lines 3-5, nodes receiving the advertisement can request content according to the advertisement);
 - wherein a publisher peer node that caches a content corresponding to a discovered advertisement is configured to provide the content corresponding to the discovered advertisement to another one of the a requesting peer node ([0023] lines 6-8, receiving requested content from the published node) in response to a request for the content from the requesting peer node ([0023], lines 4-5, request for content from requesting node); and
 - wherein the requesting peer node is configured to cache the content ([0023] lines 8-10, requesting node caches received content) and become a content publisher peer node for the content corresponding to the discovered advertisement ([0118] lines 1-9, receiving peers further broadcasting advertisement to other peers).
9. For claim 12, Burbeck discloses a system, comprising:
- a primary content publisher peer node configured to cache user-requestable contents and publish the cached contents for access by other peer nodes on a network ([0023], lines 1-3, a peer node publishes advertisements what content the node holds);

an edge content publisher peer node configured to receive the user-requestable content from the primary content publisher peer node; cache the received contents ([0023] lines 8-10, requesting peer caches received content is an edge peer node); and publish the received contents for access by the other peer nodes on the network ([0118] lines 1-9, receiving peers further broadcasting advertisement to other peers).

10. For claim 20, Burbeck discloses a method, comprising:

- a content publisher peer node caching user requestable content and publishing the cached user requestable contents for access by other peer nodes on a network ([0023], lines 1-3, a peer node publishes advertisements what content the node holds to other peers);
- one of the other peer nodes requesting a particular content on the network in response to a user request for the particular content ([0023] lines 3-5, nodes receiving the advertisement can request the content resource according to the advertisement, [0124], user requests); receiving the particular content from the content publisher peer node; caching the received particular content ([0023] lines 8-10, requesting node caches received content); and publishing the received particular content for access by the other peer nodes on the network ([0118] lines 1-9, receiving peers further broadcasting advertisement to other peers).

11. For claim 28, the claim is rejected for the same rationale as in claim 20.

12. For claims 25 and 33, Burbeck further discloses the content publisher peer node is a primary publisher of the particular content, and wherein the one of the other peer nodes is an edge publisher of the particular content ([0023], a primary publisher is a peer that originates the publishing of the instances, an edge publisher is a peer that receives the instances advertised by the primary publisher and itself publishes the instances to other peers).

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 2-5, 8, 9, 13, 14, 18, 19, 21-23, and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burbeck as applied to claims 1, 12, 20 and 28 above, in view of Leber et al. (US 2003/0233455, hereafter Leber).

15. For claim 2, Burbeck discloses the invention as in claim 1. Burbeck further discloses wherein the at least a subset of the plurality of peer nodes are each configured to discover two or more advertisements published by two or more content publisher peer nodes to advertise a particular content cached on each of the two or more content publisher peer nodes (fig. 11, [0131], peer receives responses to content query from other peers that cached the content, [0023], the other peers that cached the content are content publishers publishing advertisements, [0118], propagating or broadcasting the content advertisement)

Burbeck does not disclose:

- determine one of the two or more content publisher peer nodes as logically nearest on the network, wherein a logically nearest peer node is a peer node to which communications over the network take the least time; and
- request the particular content from the logically nearest content publisher peer node in accordance with the advertisement corresponding to the logically nearest content publisher peer node.

However, Leber discloses the same (abstract, fig. 6 steps 615-640, [0098], determine a closest peer that has the content by selecting peers that has fastest data flow, and request content from the selected closest peers)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Burbeck and Leber in order to provide peer-to-peer file sharing from the closest and fastest peers where the file is available for best quality of service.

16. For claim 3, Burbeck-Leber discloses the invention as in claim 2. Burbeck-Leber further discloses the at least a subset of the plurality of peer nodes are each further configured to cache the particular content and become a content publisher peer node for the particular network (Burbeck, [0023] lines 8-10, requesting node caches received content; [0118] lines 1-9, receiving peers further broadcasting advertisement to other peers).

17. For claims 13, 21, and 29, the claims are rejected for the same rationale as in claim 2.

18. For claims 14, 22, 23, 30 and 31, the claims are rejected for the same rationale as in claim 3.

19. For claim 4, the claim is rejected as in claim 1. Burbeck further discloses wherein the at least a subset of the plurality of peer nodes are each configured to: send a request for the particular content on the network ([0023] lines 4-5, peers requesting for content);

Burbeck does not explicitly disclose receive a portion of the particular content from the first content publisher peer node that caches the particular content in response to the request; and receive another portion of the particular content from a second content publisher peer node that also caches the particular content in response to the request

However, Leber discloses the same (abstract, requesting peers receive data portions back from the peers that have parts of a file, then reassemble the portions)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Burbeck and Leber in order to provide peer-to-peer file sharing from the peers where requested files or file parts are available as taught by Leber.

20. For claim 5, the claim is rejected as in claim 1. Burbeck further discloses wherein the at least a subset of the plurality of peer nodes are each configured to:

broadcast a request for a particular content on the network (fig. 11, user query for content resource or request content from its peers, [0127], broadcasting query);

receive a response to the request from each of two or more content publisher peer nodes that cache the particular content ([0125], [0131], identify peers satisfying the request and receive responses from these peers);

Burbeck does not explicitly disclose:

determine a logically nearest one of the two or more content publisher peer nodes on the network wherein a logically nearest peer node is a peer node to which communications over the network take the least time; and get the content from the logically nearest content publisher peer node.

However, Leber discloses the same (abstract, fig. 6 steps 615-640, [0098], determine a closest peer that has the content by selecting peers that has fastest data flow, and request content from the selected closest peers)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Burbeck and Leber in order to provide peer-to-peer file sharing from the closest and fastest peers where the file is available for best quality of service.

21. For claim 8, Burbeck discloses a system, comprising:

a plurality of content publisher peer nodes coupled to a network, wherein each of the plurality of content publisher peer nodes is configured to cache user requestable contents and to publish the cached contents on the network ([0023], lines 1-3, a peer node publishes advertisements what content the node holds, content is requestable);

a content consumer peer node coupled to the network and configured to send a request for a particular content on the network in response to a user request for the particular content ([0023] lines 4-8, a peer node requests for content based on received content advertisement, [0007], [0008], users download files); and

Burbeck does not disclose: receive the particular content from a logically nearest content publisher peer node of the plurality of content publisher peer nodes on the network wherein a logically nearest peer node is a peer node to which communications over the network take the least time.

However, Leber discloses the same (abstract, fig. 6 steps 615-640, [0098], determine a closest peer that has the content by selecting peers that has fastest data flow, and request content from the selected closest peers)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Burbeck and Leber in order to provide peer-to-peer services from the peer where the service is available with best QoS in order to save unnecessary long distance communications costs.

22. For claim 18, the claim is rejected for the same rationale as in claim 8.

23. For claim 9, the claim is rejected for the same rationale as in claim 1.

24. For claim 19, the claim is rejected as in claim 18. Burbeck-Leber further discloses means for the peer node to cache and publish the particular content for access by other peer nodes on the network (Burbeck, [0023], [0118], receiving peer node caches content and publishes to other peers).

25. Claims 6, 7, 16, 17, 26, 27, 34, and 35 rejected under 35 U.S.C. 103(a) as being unpatentable over Burbeck as applied to claims 1, 12, 20, and 28 above, and further in view of Lehtikoinen et al. (US 2004/0260701, hereafter Lehtikoinen).

26. For claims 6, 7, 16, 17, 26, 27, 34, and 35, Burbeck discloses the invention as in claims 1, 12, 20, and 28 above. Burbeck does not explicitly disclose the at least a subset of the plurality of peer nodes are member peers in a peer group, participate in a peer-to-peer networking environment implemented in accordance with one or more

peer-to-peer platform protocols for enabling peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share network resources in the peer-to-peer environment.

However, Lehtikainen discloses the same ([0038], a peer group for file sharing)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Burbeck and Lehtikainen in order to provide various services such as sharing, messaging, and chat and collaboration in a peer group (Lehtikainen, [0029], [0031]).

27. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burbeck-Leber as applied to claim 8 above, and further in view of Lehtikainen.

28. For claims 10 and 11, Burbeck-Leber discloses the invention as in claim 8 above. Burbeck-Leber does not explicitly disclose the plurality of peer nodes are member peers in a peer group, participate in a peer-to-peer networking environment implemented in accordance with one or more peer-to-peer platform protocols for enabling peer nodes to discover each other, communicate with each other, and cooperate with each other to form peer groups and share network resources in the peer-to-peer environment.

However, Lehtikainen discloses the same ([0038], a peer group for file sharing)

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Burbeck-Leber and Lehtikainen in order to provide various services such as sharing, messaging, and chat and collaboration in a peer

group (Lehikoinen, [0029], [0031]).

29. Claims 15, 24 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burbeck as applied to claims 12, 20 and 28 above, and further in view of Saulpaugh et al. (US 2004/0122903, hereafter Saulpaugh).

30. For claim 15, Burbeck further discloses an edge peer node configured to: send a request for particular content on the network in response to a user request for the particular content ([0023], lines 4-5, request for content from requesting node, [0124], user entering request);

Burbeck does not explicitly disclose receive a portion of the particular content from the primary content publisher peer node in response to the request; receive a redirection to the edge content publisher peer node from the primary content publisher peer node; and receive another portion of the particular content from the edge content publisher peer node in response to the redirection.

However, Saulpaugh discloses the same ([0076], a peer that receives a query for instances of a queried object may host one or more instances and know redirecting routes to remaining instances; so it responses to the query by returning the instances that it hosts together with routing information to other edges that host the remaining instances of that role).

Therefore, it would have been obvious for one skilled in the art at the time of the invention to combine the teachings of Burbeck and Saulpaugh in order to redirect

content query to nodes that host portions of a queried object or content.

31. For claims 24 and 32, the claims are rejected for the same rationale as in claim 15.

Conclusion

32. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hieu T. Hoang whose telephone number is 571-270-1253. The examiner can normally be reached on Monday-Thursday, 8 a.m.-5 p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

HH

/Bunjob Jaroenchonwanit/

Supervisory Patent Examiner, Art Unit 2152